

Joint Task Force on Green Building

Final Report

January 2003
Prepared for the Washington State Legislature



WASHINGTON STATE LEGISLATURE

TO: Members of the Washington State Legislature

FROM: Representative Sandra Romero, Chair
Senator Debbie Regala
Representative Mark Schoesler
Senator Pam Roach

DATE: January 10, 2003

SUBJECT: Final Report of the Joint Task Force on Green Building

We thank all members of the Joint Task Force on Green Building for volunteering their time and efforts.

The legislative proposals included in this Final Report represent the concepts on which there was considerable agreement. We intend to work together and with others during this legislative session to refine these concepts into specific proposals and to introduce these legislative proposals or revised versions thereof.

Representative Sandra Romero, Chair

Representative Mark Schoesler

Senator Debbie Regala

Senator Pam Roach

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
SUMMARY OF RECOMMENDATIONS	2
I. INTRODUCTION	2
A. Establishment and Membership	2
B. Interim Meeting Schedule	2, 3
II. LEGISLATIVE RECOMMENDATIONS	4
III. SUPPORT FOR OTHER PROPOSALS	4, 5
APPENDICES ATTACHED	

EXECUTIVE SUMMARY

The Joint Task Force on Green Building ("Joint Task Force") was established by the Washington State House of Representatives and the Washington State Senate in 2002. The Joint Task Force includes the following 10 members: two members of the House of Representatives; two members of the Senate; a representative of the Office of Community Development; and one representative each for cities, counties, the residential building industry, the commercial building industry, and environmental organizations.

The Joint Task Force was created to review existing green building standards or programs to determine program components that are effective and ineffective; determine incentives and disincentives to implementing a program; and identify potential for low-impact development to reduce storm water management, road building, and other infrastructure costs. During the 2002 interim, the Joint Task Force held a series of meetings to study the issues with regional and national experts and other interested parties, and to take public testimony on the issues.

From those meetings and testimony, the Joint Task Force developed a list of discussion points for further consideration. The Joint Task Force members had extensive discussions on these points.

After these discussions, the Joint Task Force agreed to adopt by consensus Joint Task Force legislative recommendations. The legislative recommendations include issues related to state and public building, residential building, commercial building, and development by the Department of Transportation. The Joint Task Force agreed to recommend proposed legislation, establishing green building standards for state buildings. The Joint Task Force also agreed to provide a number of other legislative recommendations regarding residential building, commercial building, and development by the Department of Transportation.

SUMMARY OF RECOMMENDATIONS

I. INTRODUCTION

A. Establishment and Membership

The Joint Task Force on Green Building was established by the Washington State House of Representatives and the Washington State Senate by ESHB 2506. (A copy of the legislation and the Final Bill Report are attached to this Final Report as Appendix "A.") The ten member Joint Task Force includes the following:

- **House of Representatives:** Representative Sandra Romero, Chair; and Representative Mark Schoesler;
- **Senate:** Senator Debbie Regala; Senator Pam Roach;
- **Office of Community Development:** Tim Nogler, Building Code Council;
- **Residential Building Industry:** Jan Rohila, BIAW;
- **Commercial Building Industry:** Shawn Parry, Touchstone Corporation;
- **Cities:** Stuart Scheuerman; Council member, City of Sumner;
- **Counties:** Tim Botkin, Kitsap County Commissioner;
- **Environmental Organizations:** Marcy Golde, Washington Environmental Council.

The Joint Task Force was authorized to meet during the 2002 interim to study existing green building standards and programs, and to determine program components that are effective and ineffective; determine incentives and disincentives to implementing a program; and identify potential for low-impact development to reduce storm water management, road building, and other infrastructure costs.

B. Interim Meeting Schedule

The Joint Task Force held seven public meetings during the 2002 interim.

- **July 1, 2002 [Olympia]:** The Task Force heard presentations on green building, the Leadership in Energy and Environmental Design (LEED) government and commercial building program, and the Built Green residential green building program of the Master Builders of King and Snohomish Counties. Joint Task

Force staff prepared a memorandum providing background information on green building, including an overview of some of the green building standards and programs to be studied. (A copy of the memorandum is attached to this Final Report as Appendix "B.")

- **August 6, 2002 [Olympia]:** The Task Force heard presentations on stormwater regulations and programs and their relationship to green building standards. The Task Force then toured the Indian Creek Stormwater Treatment Facility in Olympia. Joint Task Force Staff prepared memoranda on stormwater regulation in Washington and on stormwater components of green building programs. (Copies of the memoranda are attached to this Final Report as Appendix "C.")
- **September 18, 2002 [Seattle]:** The Task Force heard presentations on the City of Seattle's sustainable building program and projects; building codes and regulations; energy efficiency; health and indoor air quality; sustainable building materials; green building financing; and infrastructure. The task force also toured the newly constructed Seattle Justice Center, and attended the Governor's announcement of Executive Order 02-03, regarding sustainable practices by state agencies. (A copy of Executive Order 02-03 is attached to this Final Report as Appendix "D.")
- **October 18, 2002 [Olympia]:** The Task Force heard presentations on green building standards and programs being used in the state by state agencies, commercial builders, and residential builders.
- **November 14, 2002 [Olympia]:** The Joint Task Force met to discuss green building programs and potential legislative recommendations. The discussion regarding green building programs centered around the pros and cons of sustainable building, and incentives and disincentives to sustainable building. Following this discussion, Joint Task Force members provided their individual suggestions and ideas for legislative recommendations. The suggestions and recommendations were organized into four main categories of sustainable buildings: state/public building, residential building, commercial building, and land use. The suggestions and ideas were incorporated into a list of "discussion points" for the Joint Task Force members' consideration. (A copy of the list is attached to this Final Report as Appendix "E.")
- **December 13, 2002 [Olympia]:** The Joint Task Force began discussing the list of individual members' suggestions and ideas for green building programs and potential legislative recommendations. The legislative recommendations are provided below in section II.

- **January 10, 2003 [Olympia]:** The Task Force met for final review and adoption of this Final Report.

Copies of the agendas for all Joint Task Force meetings are attached to this Final Report as Appendix "F."

II. LEGISLATIVE RECOMMENDATIONS

The Joint Task Force agreed to recommend legislation to adopt the United States Green Building Council Leadership in Energy and Environmental Design ("LEED") standards for state-funded construction and building renovation projects. The legislation requires that all eligible state-funded new and renovated buildings, designed and constructed by state agencies, public higher education institutions, and school districts meet minimum standards of efficiency based on the LEED Green Building Rating System.

(A copy of the legislation is attached to this Final Report as Appendix "G.")

III. SUPPORT FOR OTHER PROPOSALS

Without agreeing to any specific legislative recommendations, the Joint Task Force expressed support for the following proposals:

A. State Building

- The Department of Transportation and the Department of Ecology should work together to identify and remove any existing barriers to low impact development, and provide credit as incentive for innovative stormwater practices.
- The Governor's Sustainability Advisory Council Coordinator should provide, through the Governor's sustainability website, a definition of "green building" and information on green building and green building programs such as LEED and Built Green. The Coordinator should also identify, through the website, any existing barriers to green building and make recommendations to the legislature for removal of the barriers.
- The state should provide leadership in researching, developing, and monitoring alternative stormwater management methods.

B. Residential Building

- The state should encourage local governments to promote the use of green building programs and practices such as Built Green, and to increase consumer awareness of green building benefits and programs. The state's efforts should

increase consumer awareness about the energy efficiency of existing structures and include what actions can be taken to improve their energy efficiency.

- The state should encourage local governments to decrease impact fees where no direct impacts exist.
- The state should encourage local governments to provide incentives such as expedited permitting process for green building.
- The Department of Financial Institutions should gather and provide information to promote green building lending programs.

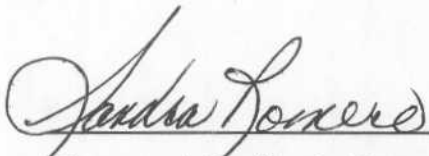
C. Commercial Building

- The state should encourage local governments to decrease impact fees where no direct impacts exist.
- The state should encourage local governments to provide incentives such as expedited permitting process for green building.

D. Road Building

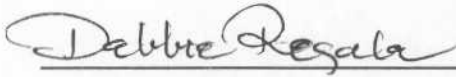
- The Department of Ecology should establish the same stormwater management requirements for the Department of Transportation that are currently required for private developers.

We, the members of the Joint Task Force on Green Building, respectfully submit this Final Report for the full consideration of the Legislature.



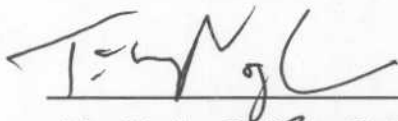
Representative Sandra Romero, Chair

Representative Mark Schoesler

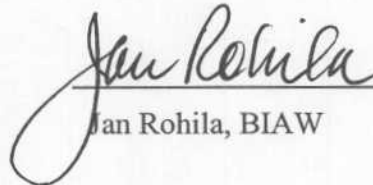


Senator Debbie Regala

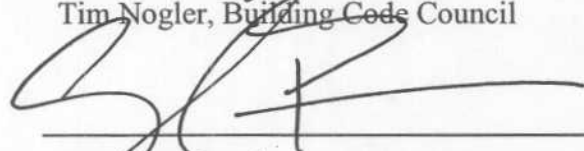
Senator Pam Roach



Tim Nogler, Building Code Council

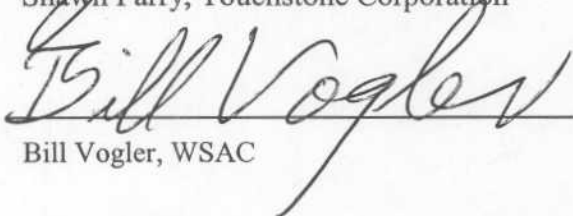


Jan Rohila, BIAW

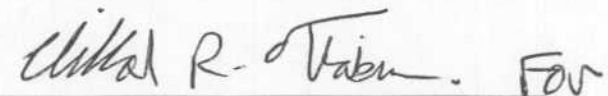


Shawn Parry, Touchstone Corporation

Councilman Stuart Scheuerman, Sumner



Bill Vogler, WSAC



Marcy Golde, WA Environmental Council

Minority Report to the Final Report of the Joint Task Force on Green Building

The members of the Joint Task Force on Green Building invested a substantial amount of time and effort during the 2002 Interim studying green building issues with regional and national experts and other interested parties, and taking public testimony on these issues. The Joint Task Force reviewed existing green building standards and programs, and discussed components of programs that are effective and ineffective; determined incentives and disincentives to implementing a program; and identified potential for low-impact development to reduce storm water management, road building, and other infrastructure costs. The Joint Task Force has done a service to the Legislature in exploring these issues.

While appreciating the significant efforts of the Joint Task Force members, the Final Report of the Joint Task Force on Green Building raises several concerns. The first general concern relates to the imposition of an unfunded mandate on public agencies, particularly in this current budget climate. Secondly, while some of the benefits of green building may provide an economic benefit such as energy conservation and recycling of materials, some of the benefits are intangible, and thus provide no economic value. A final general concern is that the United States Green Building Council Leadership in Energy and Environmental Design ("LEED") green building rating system, recommended by the Joint Task Force members, unfairly discriminates against publicly owned timber in the State of Washington by specifying a preference for certified timber, even though Washington forest practice rules ensure that some of the best timber practices in the country are employed. At this point in time, we cannot afford to discriminate against timber in Washington.

Minority Report

The Members of the Joint Task Force on Green Building whose signatures appear below respectfully submit this Minority Report to the Final Report of the Joint Task Force on Green Building for the full consideration of the Legislature.

Representative Sandra Romero, Chair

Senator Debbie Regala

Tim Nogler, Building Code Council

Shawn Parry, Touchstone Corporation

Bill Vogler, WSAC



Representative Mark Schoesler

Senator Pam Roach

Jan Rohila, BIAW

Councilman Stuart Scheuerman, Sumner

Marcy Golde, WA Environmental Council

Appendix A

ENGROSSED SUBSTITUTE HOUSE BILL 2506

Passed Legislature - 2002 Regular Session

State of Washington

57th Legislature

2002 Regular Session

By House Committee on Agriculture & Ecology (originally sponsored by Representatives Romero, Linville, Fisher, Jarrett, Cody, Dickerson, Veloria, Barlean, Simpson, Rockefeller, Dunshee, Hunt, Cairnes, Schmidt, Edwards, Upthegrove, Miloscia, Anderson and Wood)

Read first time 02/08/2002. Referred to Committee on .

1 AN ACT Relating to the joint task force on green building; creating
2 new sections; and providing an expiration date.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4 NEW SECTION. **Sec. 1.** The legislature finds that citizens in many
5 communities desire homes that, in addition to being well-built and
6 affordable, are also environmentally "friendly." In addition to the
7 public demand for low-impact development and its environmental
8 benefits, the legislature also finds that low-impact developments have
9 significant potential to reduce the costs of storm water management,
10 energy generation, road construction, and other local infrastructure
11 costs for our communities. The legislature further finds that a number
12 of new programs have been developed over the past few years, both
13 within the state and across the country, to promote and provide for
14 low-impact development.

15 The legislature therefore finds that there is a need to evaluate
16 local and national low-impact development programs to identify how the
17 state government can play a positive role in facilitating local efforts
18 to meet public demand for more livable communities and to reduce the
19 environmental and social costs of our current development practices.

1 NEW SECTION. **Sec. 2.** (1) The joint task force on green building
2 is created, to consist of the following ten members:

3 (a) Two members of the house of representatives, one from the
4 majority caucus and one from the minority caucus, to be appointed by
5 the speaker of the house;

6 (b) Two members of the senate, one member from the majority caucus
7 and one from the minority caucus, to be appointed by the senate
8 majority leader;

9 (c) One member from the office of community development of the
10 department of community, trade, and economic development, appointed by
11 the director of the department of community, trade, and economic
12 development; and

13 (d) One member representing each of the following interests,
14 selected by the associations representing those interests: The
15 residential building industry, the commercial building industry,
16 cities, counties, and environmental organizations.

17 (2) Legislative members of the task force shall be reimbursed for
18 travel expenses as provided in RCW 44.04.120. The staff of senate
19 committee services and the office of program research of the house of
20 representatives shall provide support to the task force.

21 (3) The chair may appoint experts and advisors as nonvoting members
22 of the task force to provide information on various subjects. The task
23 force shall establish rules of procedure at its first meeting.

24 NEW SECTION. **Sec. 3.** The joint task force on green building
25 shall:

26 (1) Complete a thorough study of cities and counties that offer a
27 form of green building and low-impact development codes to:

28 (a) Determine components of the different programs that are
29 effective and what is ineffective;

30 (b) Determine incentives and disincentives to implementing a green
31 building program;

32 (c) Study existing green building standards or programs, such as
33 Leadership in Environmental and Energy Design (LEED), Build a Better
34 Kitsap, Build a Better Clark County, the National Institute of
35 Standards and Technology Building for Environmental and Economic
36 Sustainability (BEES), the United States Environmental Protection
37 Agency's Environmentally Preferable Purchasing Program (EPP), and the

1 National Institute of Building Sciences Whole Building Design Guide
2 (WBDG); and

3 (d) Identify the potential for low-impact development to reduce
4 costs of storm water management, road building, and other
5 infrastructure needs; and

6 (2) Commence the study within thirty days of adjournment sine die
7 of the 2002 regular session, and present a final report of its findings
8 and any recommendations to the legislature by January 1, 2003.

9 NEW SECTION. **Sec. 4.** This act expires March 30, 2003.

--- END ---

FINAL BILL REPORT

ESHB 2506

C 308 L 02

Synopsis as Enacted

Brief Description: Creating a joint task force on green building.

Sponsors: By House Committee on Agriculture & Ecology (originally sponsored by Representatives Romero, Linville, Fisher, Jarrett, Cody, Dickerson, Voloria, Barlean, Simpson, Rockefeller, Dunshee, Hunt, Cairnes, Schmidt, Edwards, Upthegrove, Miloscia, Anderson and Wood).

House Committee on Agriculture & Ecology
Senate Committee on Environment, Energy & Water

Background:

"Green building" is a term currently used for programs that promote environmental conservation and sustainable development. The concept of green building incorporates development standards and building construction processes that promote resource conservation (including energy efficiency, renewable energy, and water conservation features), consider environmental impacts and waste minimization, create a healthy and comfortable environment, reduce operation and maintenance costs, and address issues such as historical preservation, access to public transportation, and other community infrastructure systems.

Green building initiatives have been developed by various federal and state agencies, and green building programs have been established by local governments throughout the United States. Some Washington local governments and builders, including Kitsap County, Clark County, and the Master Builders Association of King and Snohomish Counties, have implemented green building programs.

Summary:

A task force on green building is created. The task force includes the following 10 members: two members of the House of Representatives; two members of the Senate; a representative of the Office of Community Development; and one representative each for cities, counties, the residential building industry, the commercial building industry, and environmental organizations. The task force chair is authorized to appoint experts and advisors as nonvoting members.

The task force is required to complete a thorough study of cities and counties that offer green building programs and low-impact development codes to:

- determine program components that are effective and ineffective;
- determine incentives and disincentives to implementing a program;
- study various existing green building standards; and
- identify potential for low-impact development to reduce storm water management, road building, and other infrastructure costs.

The task force study must begin its study within 30 days of adjournment of the 2002 regular session. The task force is required to submit a final report, including findings and legislative recommendations, to the Legislature by January 1, 2003. The task force provisions expire March 30, 2003.

Votes on Final Passage:

House 68 29

Senate 48 0

Effective: June 13, 2002

Appendix B

MEMORANDUM

To: Members of the Joint Task Force on Green Building

From: Amy Wood and Caroleen Dineen, House Committee Staff
Richard Rodger and Elizabeth Mitchell, Senate Committee Staff

Date: July 1, 2002

Subject: *Background Information on Green Building*

INTRODUCTION

"Green building" is a term currently used for programs that promote environmental conservation and sustainable development. The concept of green building incorporates both development standards and building construction processes that promote resource conservation, consider environmental impacts and waste minimization, create a healthy and comfortable environment, reduce operation and maintenance costs, and address issues such as historical preservation, access to public transportation, and other community infrastructure systems.

Green building standards and programs include numerous and diverse building design and site development components. Some of these components are:

- energy efficiency in design, including installing energy-efficient appliances, reducing windows on east and west facades and installing fewer windows, and use of renewable energy sources;
- low-impact development techniques, including clustering buildings, maintaining existing vegetation, and reducing creation of impervious surfaces;
- conservation of water and other natural resources by methods such as installation of water-efficient systems and reducing the raw materials needed for construction; and
- recycling of construction waste and use of salvaged construction materials.

Proponents of green building identify several benefits of employing green development standards and techniques in development projects. One stated benefit is reduced capital costs for infrastructure by working with the site's natural features and reducing or eliminating mechanical systems through efficient energy design. Another is reduced operating costs for energy, water, maintenance, and waste removal. Other stated benefits are marketing exposure from media coverage; robust sales and buyer premiums for identified green developments; streamlined project approvals and establishment of community support; reduced risk of liability for claims such as "sick building syndrome" from poor indoor air quality; and productivity gains for employees working in environments with

improved lighting, heating and cooling.¹ Those opposed to adoption of mandatory green building standards and programs have expressed concern about the potential for state or local standards to conflict with existing national voluntary standards and programs.²

Green building initiatives have been developed by various federal and state agencies. Private organizations are also active in developing green building standards and programs. In Washington, Kitsap County and Clark County have formally adopted green building programs, and the Master Builders Association of King and Snohomish Counties has created a "Green Built" program for its members.

JOINT TASK FORCE ON GREEN BUILDING

Creation and Membership

ESHB 2506 (enacted as chapter 308, Laws of 2002) created a Joint Task Force on Green Building. The following 10 members serve on this Joint Task Force:

- two members of the House of Representatives, one each from the majority and minority caucuses, appointed by the Speaker of the House of Representatives;
- two members of the Senate, one each from the majority and minority caucuses, appointed by the Senate Majority Leader;
- a representative of the Office of Community Development, appointed by the Director of the Department of Community, Trade, and Economic Development; and
- one representative each for the following interests, appointed by the associations representing those interests -- cities, counties, the residential building industry, the commercial building industry, and environmental organizations.

ESHB 2506 authorizes the chair of the Joint Task Force to appoint experts and advisors as nonvoting members.

Duties

ESHB 2506 directs the Joint Task Force to complete a thorough study of cities and counties that offer green building programs and low-impact development codes. The Joint Task Force is also required to study existing green building standards or programs. The legislation specifies standards and programs that must be studied are: (1) the U.S. Green Building Council's Leadership in Environmental and Energy Design (LEED); (2) the National Institute of Standards and Technology

¹"Buildings and Land," Green Development: Integrating Ecology and Real Estate, available at www.rmi.org/sitepages/pid221.php.

²Testimony on HB 2506 before the House Agriculture and Ecology Committee, January 31, 2002.

Building for Environmental and Economic Sustainability (BEES); (3) the United States Environmental Protection Agency's (EPA's) Environmentally Preferable Purchasing Program (EPP); (4) the National Institute of Building Sciences Whole Building Design Guide (WBDG); (5) Kitsap County's "Build a Better Kitsap" program; and (6) Clark County's "Build a Better Clark" program.

ESHB 2506 specifies the following purposes of the Joint Task Force's study:

- determining components of green building programs that are effective and ineffective;
- determining incentives and disincentives to implementing a green program; and
- identifying the potential for low-impact development to reduce storm water management, road building, and other infrastructure costs.

The Joint Task Force is required to submit a final report, including findings and legislative recommendations, to the Legislature by January 1, 2003.

GREEN BUILDING STANDARDS AND PROGRAMS

LEED - Leadership in Energy & Environmental Design

LEED is the U.S. Green Building Council's green building rating system. The LEED Green Building Rating System is a voluntary designation/certification program that may be sought by building owners (or other interested parties) for new or existing commercial, institutional, or high-rise residential buildings.

LEED was developed by the U.S. Green Building Council (USGBC), a non-profit consortium of organizations involved in the design and construction of buildings. The USGBC includes architects, engineers, contractors, developers, product manufacturers, environmental groups, and government agencies.

The primary goal of LEED is to move the market toward more sustainable design. LEED defines the term "green building," and serves as a guide for the design and construction of new and existing buildings. LEED allows tradeoffs between strategies, so that sustainability can be maximized within the limits of budget and other constraints.

The LEED program was designed to encourage construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and the occupants in five broad areas: (1) sustainable site planning; (2) safeguarding water and water quality; (3) energy efficiency and renewable energy; (4) conservation of materials and resources; and (5) indoor environmental quality. In each category, basic prerequisites must be met. Points are awarded in each category based on achievement beyond the minimum requirements. Based on the number of points earned, a project may be rated Platinum, Gold, Silver, or Bronze, or may not be rated.

LEED is currently being used by private companies, universities, and government agencies for new projects. Several cities and government agencies have adopted the LEED green building rating

system, including the U.S. General Services Administration, the City of Seattle, and King County.

Online resources:

www.usgbc.org – The US Green Building Council

www.leedbuilding.org – LEED Program

Build a Better Kitsap

Build a Better Kitsap is a network of architects, builders, subcontractors, suppliers and real estate agents working together to provide homes that are cost effective to own and operate, protect occupants' health and well being, and help preserve the environment. The idea of Build a Better Kitsap was forged through a partnership between the Home Builders Association of Kitsap County and the Kitsap County Public Works, who provided the grant funding along with the Department of Ecology.

Build a Better Kitsap utilizes a market-based approach that encourages and promotes the use of efficient development and provides new home and remodeling project buyers with homes that are energy efficient, provide improved indoor air quality and health benefits, and promote sustainable construction practices.

The Build A Better Kitsap program establishes building code standards beyond Washington building code requirements. Building to "Code Plus" standards improves a home's performance and provides economic and environmental benefits, including using less energy to heat and cool a home, using natural resources in an efficient manner, and improving the quality of indoor air.

The program has received national attention. The Clark County Home Builders Association used the Build A Better Kitsap program as a model in developing their "Build A Better Clark" program. The National Association of Home Builders Research Center (NAHB) is utilizing Build a Better Kitsap as a model for their national "green" building program for local associations. The Washington State Department of Ecology awarded Build A Better Kitsap their 1997 "Most Innovative" Program for Waste Reduction and Recycling. In addition, Build A Better Kitsap has been awarded a Kitsap County Environmental Partnership Award, the NAHB - Executive Officers Council Association Excellence Award as the Best Public Relations Program, and a Special Chairman's Award from the NAHB State & Local Government Affairs Recognition Award.

Online resources:

<http://www.kitsaphba.com/bbk.html> - Build a Better Kitsap

Build a Better Clark

Like Build a Better Kitsap, Build a Better Clark is made up of a network of architects, builders, subcontractors, suppliers and real estate agents working together to provide homes that are cost

effective to own and operate, that protect the occupants' health and well being, and help preserve the environment. Build a Better Clark began with the idea that there is a way to build safe, quality homes and preserve the environment at the same time. A team of local experts worked with a nationally acclaimed consulting firm to design a program around this idea. Their work was coordinated by the Building Industry Association of Southwest Washington. Program research and development were funded by Clark County.

The Build a Better Clark program, like the Build a Better Kitsap program, establishes "Code Plus" standards to improve home performance and provide economic and environmental benefits, including using less energy to heat and cool the home, using natural resources in the most efficient manner, and improving the quality of the indoor air.

The Building Industry Association of Southwest Washington reviews the features included in each home or remodel constructed in the Build a Better Clark program. Construction projects meeting program standards are awarded a 1-, 2-, or 3-star certificate. A 3-star rating is the highest level of achievement.

Online resources:

http://www.cchba.com/build_a_better_clark_page.htm#star

National Institute of Building Sciences Whole Building Design Guide (WBDG)

Architects, engineers, and project managers can use this guide to improve the performance and quality of their buildings by following the guidance and recommendations provided for specific building types and for design objectives.

For each general "**building type**" the guide describes the attributes and requirements of the type and provides links to information on more specific uses and to a series of "resource pages" explaining standards, technologies and emerging issues relevant to that specific use type. The information will eventually include all of the following building types (information exists for the underlined types):

<u>Administrative</u>	Health	Production
Aviation	Historic	<u>Research Facilities</u>
Civil Works	Housing	Retail
Communications	<u>Justice</u>	<u>Storage</u>
Community Services	<u>Library</u>	<u>Transportation</u>
<u>Education</u>	Lodging	Utility/infrastructure
Food Service	Maintenance	Waterfront

"**Design objectives**" contains information organized by the specific design goal. Each of the design

objectives are described with key "principles" and is linked to a series of "resource pages" explaining standards, technologies and emerging issues relevant to the subject. The WBDG recommends that all buildings should be: accessible, aesthetic, cost-effective, durable, functional, productive, safe and sustainable.

Online resources:

<http://www.bfrl.nist.gov/dae/software/bees.html>

U.S. Environmental Protection Agency's Environmentally Preferable Purchasing Program (EPP)

Environmentally Preferable Purchasing is a federal agency-wide program that encourages and assists executive agencies in the purchasing of environmentally preferable products and services. "Environmentally preferable" means that the "products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose"³

The EPP currently includes specific information concerning the following products or services: buildings, cleaners, conferences, electronics, food serviceware, and carpets.

Online resources:

<http://www.epa.gov/greenbuilding/material.html>

National Institute of Standards and Technology's Building for Environmental and Economic Sustainability (BEES)

BEES is a computer program, aimed at designers, builders, and product manufacturers, that provides a technique for selecting cost-effective green building products. The software includes actual environmental and economic performance data for over 65 building products.

Online resources:

<http://www.wbdg.org/index.asp>

³Executive Order 13101.

Please contact any of us if you have any questions regarding this memorandum or need additional information.

Amy E. Wood, 360-786-7127

Caroleen Dineen, 360-786-7156

Richard Rodger, 360-786-7461

Elizabeth Mitchell, 360-786-7430

Appendix C



WASHINGTON STATE LEGISLATURE

MEMORANDUM

To: Members of the Joint Task Force on Green Building

From: Caroleen Dineen, Senior Counsel, Office of Program Research

Date: August 6, 2002

Subject: *Stormwater Regulation in Washington*

INTRODUCTION

In Washington, a combination of federal, state, and local laws govern stormwater management. Stormwater's water quality implications are addressed in federal and state water quality laws. Counties and cities have responsibilities under federal and state law to manage stormwater and have the authority under state law to construct and operate storm water management systems.

The Joint Task Force on Green Building is directed to evaluate green building programs and standards, including review of stormwater management as part of the low-impact development component of such programs. Specifically, legislation directs the Joint Task Force to "[i]dentify the potential for low-impact development to reduce the costs of storm water management, road building, and other infrastructure needs." *Chapter 308, Laws of 2002 (ESHB 2506)*.

Green building programs incorporate storm water management in various ways. Stormwater techniques addressed in green building programs include bioretention, grass swales, vegetated rooftops, and permeable pavement. Derek Green, Office of Program Research legal intern, has prepared a memorandum (included with your meeting materials) summarizing various green building stormwater management components.

This memorandum provides background information on the regulatory framework for stormwater management programs in Washington, focusing directly on stormwater components of federal and state water quality laws. Please contact me (786-7156) if you have any questions regarding this information or if you need any assistance.

FEDERAL WATER POLLUTION CONTROL LAW

Comprehensive federal water pollution legislation was first enacted in 1948. This foundation was expanded through federal legislation enacted in 1956 and 1965. Federal law at this time included principles of federal-state cooperative program development, directed states to develop water quality standards for interstate waters, and provided limited federal financial assistance.

The modern framework for federal water pollution control regulation was enacted in 1972 as federal law amendments now referred to as the Clean Water Act (CWA). The CWA sets a national goal to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to eliminate discharge of pollutants into navigable waters. "Pollutant" is defined to include a variety of materials that may be discharged into water through human activities, construction or industrial processes, or other methods. "Navigable waters" is defined broadly to include:

- navigable waters and their tributaries;
- interstate waters;
- oceans out to 200 miles; and
- intrastate waters if used for recreation by interstate travelers or if used for commercial fishing or industrial activities related to interstate commerce.

The CWA added several elements to federal water pollution control law. The CWA sets technology-based effluent limitations for discharges to navigable waters. In addition, the CWA authorizes federal grants to finance sewage treatment systems improvements.

The CWA also requires states to adopt standards to protect fish and other aquatic life as well as humans using water for recreation, drinking water, and fish. Water quality standards are rules specifying the desired water quality to be achieved or maintained and protecting existing water quality from degradation. Standards consist of:

- designated uses, or desired uses of the water specific to each waterbody;
- criteria necessary to protect designated uses (may be numeric or narrative limits); and
- the Antidegradation Policy, establishing procedures to follow when considering regulating an activity which might affect a particular water body.

States may adopt policies allowing flexibility to adjust designated uses or criteria on a site-specific basis.

Finally, the CWA establishes the National Pollution Discharge Elimination System (NPDES) permit system to regulate wastewater discharges from point sources to surface waters. "Point sources" are defined generally as discernable, discrete, and confined conveyances from which pollutant discharges can or do occur. NPDES permits are required for anyone who discharges wastewater to surface waters or who has a significant potential to impact surface waters.

A wastewater discharge permit places limits on the quantity and concentrations of contaminants that may be discharged. Permits may require wastewater treatment or impose operating or other conditions, including monitoring, reporting, and spill prevention planning. NPDES permits are valid for five years but can be renewed.

The United States Environmental Protection Agency (EPA), through its Office of Water, implements the CWA. The EPA may delegate authority to states to issue NPDES permits and administers the NPDES program in nondelegated states. The Washington Department of Ecology (DOE) has been delegated NPDES permit authority by the EPA.

STATE WATER POLLUTION CONTROL LAW

Washington enacted state water pollution control legislation in 1971. The Pollution Disclosure Act of 1971 requires all pollution dischargers to use all known, available, and reasonable methods of waste water treatment (AKART) before discharge to prevent pollution. In addition to its NPDES permit responsibilities, the DOE administers a state program for discharge of pollutants to state waters. State permits are required for anyone who discharges waste materials from a commercial or industrial operation to ground or to publicly-owned treatment plants. State permits are also required for municipalities that discharge to ground.

The DOE issues both individual permits (covering single, specific activities or facilities) and general permits (covering a category of similar dischargers) in the state and NPDES permit programs. Activities covered by permits include construction activities, industrial operations, and stormwater discharges. Recently the DOE has adopted NPDES permits for application of aquatic pesticides.

The DOE establishes annual fees to collect expenses for issuing and administering state and NPDES discharge permits. Fees must be based on factors relating to the complexity of permit issuance and compliance. Fees must be established to fully recover but not exceed expenses of the program. Fees are to cover permit processing, monitoring, compliance, evaluation, inspection, and program overhead costs. Fees may be based on pollutant loading and toxicity and may be designed to encourage recycling and reduction of pollutant quantity.

STORMWATER DISCHARGE PERMITS

The federal CWA was amended in 1987 to classify stormwater discharges from certain industries and municipalities as point sources of pollution requiring NPDES permits. The EPA stormwater

regulations implementing this federal law requirement established two phases for the stormwater permit program: Phase I and Phase II. Phase I has been implemented in Washington, and implementation of Phase II is pending.

Phase I stormwater NPDES permits have been issued to cover stormwater discharges from certain industries, construction sites involving more five or more acres, and municipalities with a population greater than 100,000. Phase I permits for construction and industrial activities require development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). Public entities covered under Phase I municipal stormwater NPDES permits include King County, Pierce County, Snohomish County, Clark County, City of Seattle, City of Tacoma, and the Washington State Department of Transportation facilities in the named jurisdictions.

Phase II permits are required for operators of small municipal separate storm sewer systems (MS4s) located in "urbanized areas" as defined by the Bureau of the Census and for operators of construction activities disturbing between 1 and 5 acres of land. MS4s are storm water conveyances (e.g., drainage systems on roads, storm drains) owned or operated by a public entity (e.g., state, city, town, special district) discharging into navigable waters that are not a combined sewer and not part of publicly owned treatment works (POTW). Municipal stormwater permits require the implementation of a Stormwater Management Program to reduce pollutant discharges and water quality impacts. Phase II communities, including many jurisdictions in Washington, are required to apply for a storm water permit by March 2003.

LOCAL STORMWATER PROGRAMS

Local governments regulate stormwater management. Stormwater impacts of development proposals may be addressed during environmental project review under the State Environmental Policy Act and through stormwater regulations applicable to development projects. The DOE prepares stormwater management manuals to assist local governments and businesses to develop local stormwater programs. The DOE recently completed its revision of the western Washington manual and is currently working to complete the eastern Washington manual. Information on the DOE's Stormwater Manual for Western Washington is available via the Internet at http://www.ecy.wa.gov/programs/wq/stormwater/#ww_manual.

Stormwater sewerage facilities may be operated by counties, cities, towns, metropolitan municipal corporations, public utility districts, and water-sewer districts. Generally, these entities' authority to operate these systems includes the power to construct, acquire, maintain and operate sites and facilities for stormwater drainage and to establish rates and charges for the service and facilities. Rates and charges must be uniform for the same class of customers or service and facility, counties may consider a variety of factors when developing these rates and charges (i.e., services furnished; benefits received; land's character, use, or water runoff characteristics; land user's nonprofit public benefit status; land user's income level; or other matters which present a reasonable difference as a ground for distinction).



WASHINGTON STATE LEGISLATURE

MEMORANDUM

To: Members of the Joint Task Force on Green Building

From: Derek Green, Legal Intern, Office of Program Research, (360) 786-5793

Date: August 6, 2002

Subject: *Stormwater Components of Green Building Programs*

INTRODUCTION

Included in the legislation creating the Joint Task Force on Green Building is a directive to review the use of low-impact development (LID) practices in stormwater management. This memorandum summarizes some of the more commonly used LID techniques and describes how those techniques have been incorporated into some stormwater management programs.

An LID approach to stormwater management focuses on reducing the amount of surface water runoff on-site. This approach contrasts with traditional stormwater management practices, which emphasize collecting and removing water runoff from the land.

LID consists of a series of “micro-scale” controls, such as strategically placed landscaping, designed to re-create the natural flow and retention of water on the land. These techniques can be incorporated alongside conventional stormwater management practices or can work independently. Case studies document LID use in both new developments and in retrofitting/rehabilitation projects. Opportunities for using LID increase the more it is incorporated into the overall development design.

CASE STUDIES ON THE EFFECTIVENESS OF PARTICULAR LID TECHNIQUES

A review of LID case studies by the United States Environmental Protection Agency (EPA) found the use of LID “more cost effective and lower in maintenance than conventional, structural stormwater controls.”¹ At an appropriate site, one study found that LID can reduce costs for infrastructure construction and maintenance by 25-30%.²

¹Office of Water, EPA, Pub. No. 841-B-00-005, *Low Impact Development: A Literature Review* (2000).

²Larry Coffman, *Low Impact Development—A New Stormwater Management Paradigm*. From *Low Impact Development in Puget Sound Conference*, Plenary Session (2001).

However, the EPA review noted that LID techniques may not eliminate the need for conventional stormwater controls. LID is somewhat site-specific and may not be suitable for all sites. Soil permeability, water table depth, and slope of the site are noted considerations.

Other factors also can influence the effectiveness of LID techniques. Existing ordinances and codes may restrict the use of LID, and studies have noted public concerns over reducing conventional drainage techniques and modifying traditional street designs. In addition, maintenance of LID sites can be more complicated than conventional stormwater management because LID's micro-scale measures are often located on private property.

The following table provides a description of some commonly used LID control measures and summarizes the EPA findings on the effectiveness of these techniques. Of note, since the use of LID is still relatively new, the EPA review is based on short-term studies.

EPA Review of Case Studies: Effectiveness of Particular LID Techniques³		
Technique/ Control	Description	Effectiveness
Bioretention	"Rain gardens"- specially landscaped area used to filter/store runoff.	Effective at reducing runoff volume and treating "first flush" of stormwater.
Grass swales	Areas adjacent to impermeable ground, used to receive runoff.	Effective at reducing runoff and pollution, if adequately sized and placed.
Vegetated rooftops	Planting media to store runoff, filter pollutants and reduce energy consumption.	Can reduce runoff by 50% by reducing impervious surfaces. Commonly used in Germany.
Permeable pavement	Porous-pavement designed to enable infiltration of surface water into the ground.	Decreases runoff by reducing the amount of impervious surfaces, increasing infiltration and treatment of pollution while reducing runoff. May increase costs.

COMMUNITY STRATEGIES FOR INCORPORATING LID INTO STORMWATER MANAGEMENT

A number of programs throughout the country currently incorporate LID techniques into stormwater management and green building objectives. The following sections separate these strategies into three broad categories: market-based programs, government standards for public buildings, and government endorsed programs and regulations for private development.

1. Market-based programs

³Office of Water, EPA, Pub. No. 841-B-00-005, *Low Impact Development: A Literature Review* (2000).

Market-based programs rely on guidelines defined by industry and voluntarily conformed with by builders and developers. These programs are based on point systems. The participating projects (new building, development etc.) receive points for meeting certain green building objectives. In return, certified projects can be marketed as participating members of the “green” programs. Both self-certifying and independently certified programs currently exist.

The table below describes these practices and programs.

Market-Based Programs	
Stormwater Strategy	Example Programs
Self-Certifying Program: Points for incorporating stormwater management into development.	Build a Better Kitsap: Point-system approach customized for developers, builders, etc. Participant can earn points for reducing runoff through limiting impervious surfaces and infiltration strategies. <ul style="list-style-type: none"> Example: builder can receive a possible 8-11 points for using LID techniques. (A total of 10 points is required for one-star rating; 70 points for three star). <i>Similar Programs:</i> Build a Better Clark; Built Green
Independently Certified Programs: Similar approach, but independently validated.	Leadership in Energy & Environmental Design (LEED): Point-system approach; currently only for new buildings. <ul style="list-style-type: none"> Example: 1 point for flow reduction through maintaining/reducing runoff; 1 point for implementing EPA best management practices for treating stormwater. (26 points required for minimum LEED certification; 69 points possible) Program also suggests strategies for maintaining natural flows. <i>Similar Programs:</i> LEED is developing program for existing buildings.

2. Government standards for public buildings

Government entities at all levels have developed green building standards for government facilities. These standards incorporate environmental considerations into bidding and contracting decisions and may use standards of existing market programs, such as LEED.

The following table summarizes these practices.

Government Standards for Public Buildings	
Stormwater Strategy	Example Programs
Purchasing: Calculate environmental benefits into bidding and contracting decisions.	Federal Government: Environmentally Preferable Purchasing (EPP) program uses Building for Environmental and Economic Sustainability (BEES) tool to compare effectiveness of products related to stormwater, such as impervious surfaces. Adopted by Executive Order. <i>Similar Programs:</i> Oregon Sustainability Act; California’s Sustainable Building Task Force.

Performance: Set performance goals that meet independent requirements.	Seattle Sustainable Building Policy: Sets LEED-silver level validation as goal for civic buildings over 5,000 feet. Includes points for flow reduction and treatment of stormwater. <i>Similar Programs:</i> City of Los Angeles Sustainable Building Action Plan
---	--

3. Government endorsed programs & regulations for private development

Government programs for private development include both mandatory regulations and recommended approaches for compliance with green building objectives. The table below summarizes these practices.

Government Endorsed Programs & Regulations for Private Development	
Stormwater Strategy	Example Programs
Endorsement/Promotion: promote systematic LID practices.	Prince George's County, MD: County officials work with developers and planners to incorporate LID techniques. LID is not mandated, but it is encouraged as means of meeting stormwater management requirements. <ul style="list-style-type: none"> Micro-scale stormwater management through four practices: runoff prevention, small-scale retention, small-scale detention, and pollution prevention. County results: model community reduced costs of development due to reduction in required stormwater infrastructure; more than 200 bioretention facilities currently used in county.
	Puget Sound Water Quality Management Plan (2000): Coordinates local, state, federal and tribal actions to develop a comprehensive stormwater management program encouraging local development of LID ordinances. Proposed 2003-2005 Work Plan makes the adoption of LID techniques a priority. Specific proposals include: <ul style="list-style-type: none"> creating model LID ordinances for site development providing technical and financial assistance to local communities promoting the use and understanding of LID techniques through the development of research and training materials
Incentive based program: reduce costs if development meets green objectives	New York State Green Building Tax Credit: Tax credits for owners and tenants of buildings meeting green standards, including compliance with stormwater regulations.
	Cleanwater Incentive and Discount Program (Portland, OR): Program to reduce users' stormwater management charges up to 35% for incorporating LID techniques that result in reduced stormwater runoff (from roof, driveway, paved area, etc). Not yet in operation. <i>Similar Program:</i> Bellevue has a similar incentive program, but it is based on more conventional "water detention ponds."

Government Endorsed Programs & Regulations for Private Development	
Stormwater Strategy	Example Programs
Fees: stormwater management fees charged to owners of all developed land. Amount of fee is contingent on the permeability of the land.	Prince William County, VA: Implemented stormwater utility fees for residential and nonresidential developed property. Nonresidential development charges based on percentage of impermeable land developed. Development fee also imposed based on costs of drainage plans. Fees are used to fund improvements to stormwater management. <i>Note:</i> Fees are used by county for more conventional stormwater management techniques, not LID.
Regulations: mandated reduction in stormwater runoff.	Austin, TX: ordinances to limit impervious surfaces, encourage buffer zones, implement erosion control and promote creation of filtration basins. <i>Note:</i> Stormwater ordinances not formally linked to green building program

Appendix D

GARY LOCKE
Governor



STATE OF WASHINGTON
OFFICE OF THE GOVERNOR

P.O. Box 40002 • Olympia, Washington 98504-0002 • (360) 753-6780 • www.governor.wa.gov

RECEIVED

SEP 19 2002

EXECUTIVE ORDER 02-03

OFM DIRECTOR'S OFFICE

SUSTAINABLE PRACTICES BY STATE AGENCIES

WHEREAS, the state of Washington is committed to the mutually compatible goals of economic vitality, a healthy environment and strong communities;

WHEREAS, sustainability provides for current needs without sacrificing the needs of future generations;

WHEREAS, within state government, sustainable practices require decisions based on a systematic evaluation of the long-term impacts of an activity or product on health and safety, communities, and the environment and economy of Washington State;

WHEREAS, reversing the steady decline in the natural resources and ecosystems on which people and economic vitality depend is critical to our future;

WHEREAS, the regional and global implications of climate change, loss of biological diversity, and threats to resources such as clean water require us all to examine and change behaviors; and

WHEREAS, state government should model sustainable business practices that contribute to the long-term protection and enhancement of our environment, our economy and the health of current and future generations;

NOW THEREFORE, I, Gary Locke, Governor of the state of Washington, declare my commitment that state government operations be conducted in a manner consistent with these principles of sustainability and contribute positively towards the quality of life of all citizens.

It is **THEREFORE** ordered and directed that:

1. Each state agency shall establish sustainability objectives and prepare a biennial Sustainability Plan to modify its practices regarding resource consumption; vehicle use; purchase of goods and services; and facility construction, operation and maintenance.

Plans should be guided by the following long-term goals:

- Institutionalize sustainability as an agency value;
- Raise employee awareness of sustainable practices in the workplace;
- Minimize energy and water use;



- Shift to clean energy for both facilities and vehicles;
- Shift to non-toxic, recycled and remanufactured materials in purchasing and construction;
- Expand markets for environmentally preferable products and services; and
- Reduce or eliminate waste as an inefficient or improper use of resources.

Initial plans may be modeled on the outline accompanying this executive order and shall include descriptions of currently used sustainable practices. Each agency shall complete its initial plan by September 1, 2003. Subsequent plans shall be completed by September 1 each even-numbered year thereafter.

Each state agency shall report annually on its progress in implementing its Sustainability Plan. The first progress report shall be submitted to the Office of Financial Management by October 15, 2004. Subsequent progress reports shall be submitted each October 15.

2. The Office of Financial Management shall designate a Sustainability Coordinator to assist state agencies in meeting the goals of this executive order. The Coordinator shall:
 - Assist agencies in developing their Sustainability Plans;
 - Assist agencies in educating their employees on sustainable business practices;
 - Chair an inter-agency work group to promote information-sharing and cooperation;
 - Create and maintain a Sustainable Washington Internet Website where agency plans and accomplishments can be viewed by state agencies and the public;
 - Develop incentives to recognize innovative agency practices that foster sustainability;
 - Work to eliminate barriers to sustainable practices; and
 - Identify opportunities for coordinated sustainable activities by state agencies such as the purchase of sustainable products through state contracts.
3. The Sustainability Coordinator, in consultation with state agencies, shall establish Sustainability Advisory Council consisting of representatives from the private sector and others with sustainability expertise to advise state agencies on how to make state government operations more sustainable.

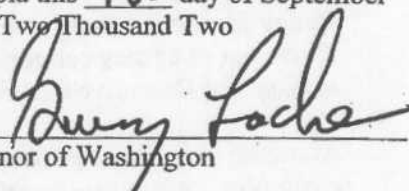
The Sustainability Advisory Council shall report to me by February 1, 2004 on the status of agency sustainability activities, opportunities for improvements based on effective strategies used elsewhere in the public and private sectors, and the best means to integrate sustainability into state government policies and actions.

I invite institutions of higher education, public schools, elected officials, commissions, and others to participate in implementing this executive order within their organizations.

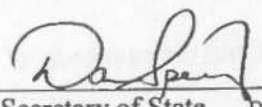
This executive order shall take effect immediately.



IN WITNESS WHEREOF, I have
hereunto set my hand and caused the seal
of the state of Washington to be Affixed at
Olympia this 18th day of September
A.D., Two Thousand Two


Governor of Washington

BY THE GOVERNOR:


Secretary of State , Deputy

Appendix E

JOINT TASK FORCE ON GREEN BUILDING
Discussion Points from November 14, 2002 Work Session

STATE/PUBLIC

- ! Mandate a certain green level for state buildings (e.g. certified LEED - any level/silver)
- ! Recommend a specific level (e.g. version of LEED)
- ! Allow GA to modify standard by rule (review)
- ! Standard should “meet or exceed” certain environmental standards
- ! Mandate study of life cycle costs & use
- ! Define green building, sustainability
- ! GCCM threshold for local governments/schools - change/elimination/preference for LEED silver
- ! Stormwater - identify barriers to innovative practices (e.g. liability & maintenance)
- ! Ensure green building practices are not prohibited by local regulations

RESIDENTIAL

- ! Tax incentive for green building - link to certain level/standard
- ! Required disclosure to property buyers of certain property concerns (e.g. fill)
- ! Promote achievable green energy efficiency goals for existing structures
- ! Increase consumer awareness about energy efficiency of existing structures/actions to improve efficiency
- ! Give local governments flexibility to decrease impact fees if no impact exists (e.g. stormwater)
- ! Expedited review/permitting incentives - define level at which incentive applies and ramification to local government for failure to do it
- ! Direction to Department of Financial Institutions regarding green building and lending practices
- ! Define green building, sustainability
- ! Built Green - promote use/increase consumer awareness of green building programs
- ! Stormwater - identify barriers to innovative practices (e.g. liability/rain barrels)
- ! Incentive to reduce cost of stormwater facilities (credit)
- ! Wetland mitigation banking
- ! Ensure green building practices are not prohibited by local regulations

JOINT TASK FORCE ON GREEN BUILDING
Recommendations from November 14, 2002 Work Session

COMMERCIAL

- ! Tax incentive for green building - link to certain level/standard
- ! Promote achievable green energy efficiency goals for existing structures
- ! Increase consumer awareness about energy efficiency of existing structures/actions to improve efficiency
- ! Give local governments flexibility to decrease impact fees if no impact exists (e.g. stormwater)
- ! Expedited review/permitting incentives (e.g. 1st in line)
- ! Define green building, sustainability
- ! Stormwater - identify barriers to innovative practices - look at credits for low-impact
- ! Wetland mitigation banking
- ! Ensure green building practices are not prohibited by local regulations

LAND

- ! Tax incentive for green development
- ! Look at incentives to reduce impact fees
- ! Promote achievable green energy efficiency goals for existing structures
- ! Expedited permitting if green building
- ! Define green building, sustainability
- ! Stormwater - identify barriers to innovative practices - look at credits for low-impact
- ! Wetland mitigation banking
- ! Ensure green building practices are not prohibited by local regulations

Appendix F



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING

July 1, 2002 1:00 - 4:30 p.m.

Conference Rooms A, B & C

John A. Cherberg Building

AGENDA

I. Welcome and Introductions (1-1:30 p.m.)

(Members introduce themselves, describe their backgrounds, and identify their objectives in serving on the Joint Task Force)

II. Selection of Joint Task Force Chair (1:30 - 1:50 p.m.)

III. Perspectives on Green Building (1:50 - 2:20 p.m.)

(panel presentation)

IV. Joint Task Force Study (2:20 p.m. - 3:45 p.m.)

- A. Discussion of scope of study
- B. Identification of potential task force experts/advisors (nonvoting members/chair appointments)

IV. Procedural Issues (3:45 p.m. - 4:10 p.m.)

- A. Discussion of meeting schedule (i.e., number/types of meetings, locations, final report deadline)
- B. Determination of decision model (i.e., consensus, majority/minority)
- C. Communications/notices (e.g., preferences for email or regular mail, contact lists, etc.)

4. Future Agenda Items (4:10 p.m. - 4:30 p.m.)

- I. Topics for next meeting and/or schedule of topics for future scheduled meetings
- II. Assignment of responsibilities (including research requests)

E. Adjournment (4:30 p.m.)



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING BROWN-BAG LUNCH MEETING

*John L. O'Brien Building, Hearing Room C
August 6, 2002 12:00 - 3:00*

AGENDA

WORK SESSION:

- I. **Overview of Stormwater Programs and Relationship to Green Building Standards**
 - A. Misha Vakoc, Environmental Protection Agency, Region X
 - B. Melodie Selby, Department of Ecology
- II. **Perspectives on Stormwater Programs and Relationship to Green Building Standards**
 - A. Curtis Hinman, WSU Pierce County Cooperative Extension
 - B. Bill Derry, CH2M Hill
 - C. Andy Haub, Stormwater Program Manager, City of Olympia Public Works Department
 - D. Scott Clark, Utility Planner, Thurston County Water & Waste Management, Storm & Surface Water Division
- III. **Comments/Discussion**

PUBLIC HEARING:

The Joint Task Force on Green Building will take public testimony regarding how stormwater issues relate to green building objectives.

- IV. **Public Comment**
- V. **Adjournment**

*The Joint Task Force on Green Building meeting will be followed by a tour of the
Indian Creek Stormwater Treatment Facility, Olympia, WA*



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING

*Seattle Department of Design, Construction, and Land Use
Key Tower, 700 Fifth Avenue, Suite 2000
Seattle, WA 98104
Wednesday, September 18, 2002 9:00 a.m. - 4:30 p.m.*

AGENDA

1. **Work Session: Sustainable Building**
 - A. Introduction: Review of City of Seattle Sustainable Building Program and Projects.
Tony Gale, AIA, City of Seattle
 - B. Building Codes and Regulations
Tim Nogler, Staff Director, Building Code Council
David Eisenburg, Director of the Development Center for Appropriate Technology
 - C. Energy Efficiency
Chuck Murray, Energy Specialist, WSU Cooperative Extension Energy Program
 - D. Health and Indoor Air Quality
Rick Courson, Cedar Bay Homes, Build a Better Kitsap

Task Force Members' tour of the newly constructed Seattle Justice Center by Jun Quan, Strategic Advisor, City of Seattle Architecture, Engineering and Space Planning

LUNCH BREAK

AGENDA

I. Work Session: Sustainable Building, (continued)

E. Sustainable Building Materials

Tom Paladino, Paladino & Company

Richard Franko, Mithun Architects + Designers + Planners

Bob Zimmer, LMN Architects

F. Financing a Green Home

*Randy Robinson, Senior Deputy Director FannieMae, Washington State
Partnership Office*

Dianne Wasson, Manager Infinity Lending, HomeStreet Bank

G. Infrastructure

Jerry Alb, Director Environmental Services, Department of Transportation

II. Public Hearing

The Joint Task Force on Green Building will take public testimony regarding sustainable building, including building codes and regulations, energy efficiency, indoor air quality, sustainable building materials, green building financing, and infrastructure.

A. Public Comment

III. Adjournment



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING

John L. O'Brien Building, Hearing Room C
October 18, 2002 – 9:00 a.m. to 12:00 p.m.

AGENDA

Work Session

- I. Recommendations Regarding Green Building Standards and Programs
 - A. Jim Cahill, Senior Budget Assistant, Office of Financial Management
 - B. Stuart Simpson, Department of General Administration
 - C. Michel George, Director of Facilities, The Evergreen State College
 - D. Jim Goldman, Turner Construction
 - E. Gary Sanford, Lozier Homes
- II. Comments/Discussion

Public Hearing

The Joint Task Force on Green Building will take public testimony regarding what recommendations it should make regarding green building standards and programs.

- III. Public Comment

Adjournment



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING

John L. O'Brien Building, Hearing Room C
November 14, 2002 – 11:00 a.m. to 2:00 p.m.

AGENDA

Call to order and introduction of new task force member

Work Session

- I. Discussion Regarding Adoption of Recommendations and Findings to be Presented to the Legislature:
 - A. Recommendation Process
 - B. Pros and Cons of Sustainable Building
 - C. Incentives and Disincentives to Sustainable Building
 - D. State Sustainable Building Programs
 - E. Task Force Recommendation

Adjournment



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING

John L. O'Brien Building, Hearing Room C
December 13, 2002 – 9:00 a.m. to 12:00 p.m.

AGENDA

Work Session:

Discussion Regarding Adoption of Recommendations and Findings to be Presented to the Legislature



WASHINGTON STATE LEGISLATURE

JOINT TASK FORCE ON GREEN BUILDING

John L. O'Brien Building, Hearing Room C
January 10, 2003 – 9:00 a.m. to 12:00 p.m.

AGENDA

Work Session:

Discussion Regarding Final Report to be Presented to the Legislature.

Appendix G

AN ACT Relating to establishing green building programs; and adding a new chapter to Title 39 RCW.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

NEW SECTION. **Sec. 1.** (1) The legislature finds that buildings can be designed, constructed, renovated, operated, and maintained in a cost-effective, resource efficient, and environmentally responsible manner. This is commonly known as "sustainable," "green," or "high performance" building. The legislature further finds that sustainable buildings generally integrate technologies, practices, and systems that are:

 (a) Environmentally sound. Sustainable buildings optimize energy, water, and materials efficiency; improve indoor environmental quality and comfort; use environmentally preferable products and processes; are sited to ensure access to public transportation and affordable housing; take advantage of proper building orientation; and preserve community and historic integrity; and

 (b) The result of superior design and construction methods. Sustainable buildings apply life cycle costing to evaluate all relevant design and construction costs.

(2) The legislature declares that the goals of the state of Washington, consistent with executive order 02-03, are to site, design, construct, renovate, operate, and maintain state buildings that are models of energy, water, and materials efficiency, while providing healthy, productive, and comfortable indoor environments and long-term benefits to the state's residents. The legislature intends the sustainable building goal to be implemented in a cost-effective manner, while considering externalities, identifying economic and environmental performance measures, determining cost savings, using life cycle costing, and adopting an integrated systems approach.

To this end the legislature intends to authorize and direct that public agencies adopt the United States green building council leadership in energy and environmental design standard. The legislature further intends that this standard guide the siting, design, construction, operation, and maintenance of state-funded major facilities entering into the predesign process after July 1, 2003.

NEW SECTION. **Sec. 2.** The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Public agency" means every state office, officer, board, commission, committee, bureau, department, public higher education institution, and school district.

(2) "Department" means the department of general administration.

(3) "Major facility" means (a) a state-funded construction project larger than five thousand gross square feet of occupied space, and (b) a building renovation project when the cost is greater than fifty percent of the assessed value and the project is larger than five thousand gross square feet of occupied space.

"Major facility" does not include garages, maintenance facilities, transmitter buildings, pumping stations, or other similar building types as determined by the department.

(4) "State-funded" means, except for school districts, the public agency received an appropriation for the facility or project in the capital or transportation appropriations act. For school districts, "state-funded" means a project that receives assistance from the state school construction assistance grants.

NEW SECTION. **Sec. 3.** (1) Except as provided in subsection (2) of this section, if a public agency determines that any major facility is to be constructed or renovated, then during the design phase of the construction or renovation the agency shall require the use of the United States green building council leadership in energy and environmental design silver standard according to the guidelines developed in section 4 of this act.

(2) If a school district receives less than one hundred percent of its funding for a major facility from the state, federal government, or both, then during the design phase of the construction or renovation the school district shall require the use of the United States green building council leadership in energy and environmental design certified standard, or a similar design standard with equivalent thresholds as may be adopted by the department, according to the guidelines developed in section 4 of this act.

(3) A new project over fifty thousand square feet and a building renovation project when the cost is greater than fifty percent of the assessed value and the project is greater than fifty thousand square feet must be certified through the United States green building council leadership in energy and environmental design certification process.

(4) If possible, any project that is required to be certified under this section is encouraged to exceed the silver standard rating.

(5) The design of a state-funded construction project that is not a major facility must include applicable green building principles when practical in the design and construction phases.

NEW SECTION. **Sec. 4.** (1) The department, in consultation with affected public agencies, shall develop and issue guidelines for administering this chapter. The purpose of the guidelines is to define a procedure and method for employing the United States green building council leadership in energy and environmental design silver and certified standards, or similar design standards with equivalent thresholds as may be adopted by the department.

(2) The department shall develop processes and systems to most effectively deliver a United States green building council leadership in energy and environmental design silver and certified standard, or similar design standard with equivalent thresholds as may be adopted by the department, and verify compliance with the established standard.

(3) The department and affected agencies shall provide a biennial report to the legislature on their efforts in implementing this chapter.

NEW SECTION. **Sec. 5.** The department and affected agencies must collaborate to identify and include in their biennial report to the legislature any existing conflicts between sustainable building requirements and other requirements of the state.

NEW SECTION. **Sec. 6.** Sections 1 through 5 of this act constitute a new chapter in Title 39 RCW.